$$\hat{h}_{ML} = \frac{1}{2T} \cdot \sum_{t=1}^{T} \bar{y}(t) \cdot z\left(t; \hat{h}_{ML}\right)^{*},$$

where $\bar{y}(t)$ denotes a vector of a downconverted and demodulated sample of said received signal, t denotes a time variable, $\hat{h}_{ML}$ denotes said maximum likelihood estimate, T denotes a sampling duration, $(\bullet)^{*}$ denotes the conjugate of the bracketed expression, and $z\left(t; \hat{h}_{ML}\right)$ denotes a mathematical scalar process involving said a priori probabilities, said variance, said vector and said maximum likelihood estimate.

6. (Original) The channel estimator of claim 5, wherein said channel tap estimator comprises:

means for generating a scalar value according to said mathematical scalar process from said a prior probabilities, said variance and said maximum likelihood estimate;

means for combining said scalar value with said vector; and

means for determining said maximum likelihood estimate from an output of said means for combining.

7. (Original) The channel estimator of claim 6, wherein said means for determining said maximum likelihood estimate comprises a summer over a window of received symbols.

8. (Original) The channel estimator of claim 6, wherein said means for generating said scalar value include means for retrieving said scalar value from a lookup table.

9. (Original) The channel estimator of claim 5, wherein said received signal comprises output of one or more despreaders.

10. (Original) The channel estimator of claim 5, wherein said received signal comprises output of more than one antenna.

11. (Original) A receiver comprising:

a first channel estimator to generate an estimate of one or more pilot channel taps of a continuous pilot channel; and

a second channel estimator to generate a maximum likelihood estimate of one or more second channel taps of a traffic channel carrying data symbols and interleaved pilot symbols from an equation involving a) said one or more traffic channel taps, b) a priori probabilities of transmitted symbols received over said traffic channel, and c) one or more noise samples, wherein said equation is an implicit equation for said one or more traffic channel taps.

12. (Original) The receiver of claim 11, further comprising:

means for combining said estimate of said one or more pilot channel taps and said maximum likelihood estimate.

13. (Currently Amended) A method comprising:

generating a maximum likelihood estimate of one or more channel taps from an equation involving a) said one or more channel taps, b) a priori probabilities of transmitted symbols in one or more samples of a received signal, wherein the a priori probabilities are based on type of the transmitted symbols, and c) one or more noise samples,

wherein said equation is an implicit equation for said one or more channel taps.

14. (Original) The method of claim 13, wherein generating said estimate comprises generating said estimate for a batch of samples at a time.

15. (Original) The method of claim 13, wherein generating said estimate comprises generating said estimate for a single sample at a time.

16. (Original) A method comprising:

generating an estimate of one or more pilot channel taps of a continuous pilot channel; and

generating a maximum likelihood estimate of one or more second channel taps of a traffic channel carrying data symbols and interleaved pilot symbols from an equation involving a) said one or more traffic channel taps, b) a priori probabilities of transmitted symbols received over said traffic channel, and c) one or more noise

samples, wherein said equation is an implicit equation for said one or more traffic channel taps; and

combining said estimate of said one or more pilot channel taps and said maximum likelihood estimate.

17. (New) The receiver of claim 1, wherein the type of the transmitted signals is data symbol type, pilot type or power control type.

18. (New) The receiver of claim 13, wherein the type of the transmitted signals is data symbol type, pilot type or power control type.